

EXHIBIT 1

**Expert Report of
Capt. Bruce Fox**

Western Tow v. Vigor

I attach:

- (i) A complete statement of all opinions I will express and the basis and reasons for them, including:
- (ii) the facts or data considered by me in forming them;
- (iii) any exhibits that I will used to summarize or support them;
- (iv) my qualifications, including a list of all publications I have authored in the previous 10 years.
- (v) I have not during the previous 4 years testified as an expert at trial or by deposition.
- (vi) A statement of the compensation to be paid for the study and testimony in the case:

Consulting Services: \$175/hour

- Investigation, Reviewing file documents
- Conference with counsel, discussions with witnesses
- Preparing and writing opinions
- Equipment inspections

All day, (8 hrs or more) or overnight travel for above services:
\$1,400/day

Testimony:
\$250/hour/min. 4 hrs

- Attending depositions or being deposed
- Trial testimony and trial participation
- Attendance at arbitration or mediation
- Associated travel for any of the above

All day, (8 hrs or more) or overnight travel for above services:
\$2,000/day

Other Travel: \$150/Hour

Retainer: \$2,000

Out of pocket expenses incurred, such as travel expenses, meals, parking, mileage, and copying, will be billed at actual cost.

Bruce A. Fox
Captain Bruce Fox

Date: March 5, 2021

**B. Fox Maritime Consulting, LLC
12215 SW 148th St.
Vashon, Wa. 98070
206-915-0389**

Date: March 3rd, 2021

Subject Expert Opinion: Western vs Vigor

I have been retained by Stephen Simms of the law firm of Simms Showers LLP to provide my professional opinion as to the duty of care and causation leading up to the sinking of the drydock YTB-70 while underway Seattle to Ensenada. The YTB-70 was under tow of the tug Ocean Ranger, Capt. Stephen McGavock.

In preparation for this report, I have reviewed the following documents:

1. Complaint of Western Towboat vs Vigor
2. Countercomplaint of Vigor
3. Survey of YFD-70 by Bowditch Marine Inc., Capt. Richard Shaw
4. Tow Recommendations by Capt. Richard Shaw, Bowditch Marine
5. YFD-70 Specifications
6. Trip In Tow Suitability Survey by Capt. Richard Shaw, Bowditch Marine
7. Voyage Plan & YDF-70 Tow Plan Amendments
8. Route Plan
9. United States Coast Pilot, Volume 7
10. Site specific Marine Weather Analysis by Compu Weather Analysis
11. Ocean Ranger vessel logs from 10-17 thru 10-26
12. Various e-mails between Capt. McGavock and Western Management
13. Various e-mails between Western Management and Vigor
14. Crew statements from Ocean Ranger crew on that voyage.

My background relevant to this case is as a Professional Mariner holding a USCG Master of Steam or Motor Vessels 1600-ton Oceans license with endorsement as Master of Towing Vessels, which I sailed continuously on from 1983 through 2015 when I retired after a continuous 40-year employment by Crowley Marine Services (CMS).

During my career I have been Captain of towing vessels ranging from 2000 hp to 9000 hp. I have made more than 100 trips along the west coast of the US, (Washington to San Diego), towing disabled vessels, large oil and cargo barges including tandem tows of barges 400' long by 100' wide, and unmanned ships along the west coast of the Continental US.

Further to my experience is extensive voyages to most ports in Alaska including the Arctic while towing oil barges, cargo barges, disabled ships, and oil drilling rigs.

Additionally, I have been CMS Special Projects Captain for military tows, dredging operations, unmanned ship moves and tows, rescue tows, container crane tows, tandem tows of ships, and tandem tows of oil barges.

CMS Training Master for new captains.

Tow Master of the Drill Rig Kulluk from Dutch Harbor Ak to Seattle and Battleship Iowa from Suisan Bay to Richmond Inner Harbor.

Company Pilot of oil barges to Vancouver, Canada and Puget Sound and company Pilot for transits through the Panama Canal.

I have had CMS towing assignments to Egypt, Saudi Arabia, Nova Scotia, Russia, China, Korea, Hawaii, Guam, Panama, Gibraltar, Italy, Africa, Trinidad, Tobago, Columbia, Brazil, Dominican Republic, Mexico, Gulf Coast, Atlantic Coast, North Pacific, Western Pacific and the Arctic.

Based on this experience and common seamanship practices I have arrived at the following observations and opinions.

Observations:

1. Vigor owned the drydock YFD-70 and contracted with Western Towboat to tow the YFD-70 from its berth in Seattle Harbor at the Vigor Shipyards to Ensenada, Mexico.
2. The tug Ocean Ranger, owned by Western Towboat was assigned to make this tow. Captain Steve McGavock assigned by Western as captain for this tow. During the tow the YFD-70 began listing by the port bow and within 12+ hours sank forcing the tug to release the brake on its tow winch and dump it's wire to avoid being dragged down with the sinking tow.
3. Vigor contracted Bowditch to survey the YFD-70. The YFD-70 surveyor's report lists numerous moderate to heavy indents throughout the hull and wastage at upper seams throughout. It was not in the surveyors report of testing anywhere on the YFD-70 of the thickness of the metal in the hull though it was noted of the numerous moderate to heavy indents and wastage at upper seams throughout.
4. The Trip in Tow Recommendations and the Tow Plan called for the Master of the tow to avoid heavy head or beam seas greater than 8-10 feet to avoid pitching or rolling and ensure that seamanship techniques are employed to minimize effects of head seas and rolling up stresses on Drydock YFB-70.
5. The Tow Plan Amendments stated under (Weather) (Ideally no more than 8-10' seas and 20-25 knots of wind). Safe refuges are limited to Columbia River Bar (worst case) and San Francisco.
6. The Ocean Ranger departed Seattle with the YFB-70 underway for Ensenada, Mexico at 12:00 Oct. 17, 2016. A distance 1,329 miles with about 1,200 miles of open water along the coast with only two safe refuges.

Opinion:

1. On October 17th, 2016 when the Ocean Ranger departed Seattle for Ensenada with the YFD-70 there were no Gale or storm force winds forecasted along the route from the Strait of Juan de Fuca to Ensenada, Mexico. A 1,200-mile open water route along the west coast of the US with only one safe port of refuge, San Francisco and a last resort second safe port being the Columbia River. The Columbia River entrance is 139 miles from the west entrance of the Strait of Juan de Fuca. San Francisco entrance is 677 miles from the Strait of Juan de Fuca. It was a sound decision to take departure at this time.
2. When the Ocean Ranger received the first Gale Watch issued by the National Weather Service at 8:58 PM PDT October 22nd they were over 400 miles south of the Strait of Juan de Fuca and its protected waters. San Francisco still lay 260 miles ahead. The Ocean Ranger had a trip total average speed at this time of 4.3 knots. It is well known to mariners sailing the west coast of the US that the general flow of the Gales and Storms generated offshore will flow north to south along the coast. The Ocean Ranger was in the position of having to ride the prevailing weather out.
3. Captain McGavock made the correct decision when he continued ahead along his route rather than turning around and running north back up the coast. He only had two choices. Turn and try to run from the approaching adverse wind and seas or continue on. If he had turned to run north from the approaching Gale he could not maintain a speed that would carry himself and the YFB-70 away from the approaching adverse weather. If he had turned around he would have been exposing his tow to heavy beam and head swells. The forecast to the north of his position was for increasingly deteriorating conditions. There was no running from the weather options available to him.
4. His decision to continue on was the right decision. This was Captain McGavock's best chance to minimize exposure to heavy seas. His logs show that as the wind and seas increased, he reduced his speed as needed to reduce stresses on the drydock. Nearby ports to consider as options for ports of refuge were Coos Bay approximately 80 miles to the Northwest and Humboldt Bay

approximately 90 miles to the Southeast. These ports were not listed in the Ocean Ranger's Tow Plan. These two ports are difficult to enter for a tow of this type on good days with mild weather and would be dangerous to enter in adverse weather.

5. When the Ocean Ranger first noticed the YFD-70 listing by the port bow Captain McGavock relayed this information to his office and he was instructed to alter course for San Francisco. When it was realized that the decision to proceed to San Francisco posed risks that were unacceptable Western towboat relayed from Vigor to Captain McGavock to proceed to Monterey Bay. During the night of Oct. 25th, it became apparent to Capt. McGavock that the YFD-70 was continuing to take water and he began altering his course to take the tow to deep water outside the Monterey Bay Marine Sanctuary. He was unable to make hard course changes for the most direct route out of the Sanctuary due to heavy seas and winds. His efforts did take the YFD-70 to deep water and nearly out of the marine sanctuary before it sank. His efforts throughout this voyage, from beginning timing of departure, through heavy weather to an unfortunate ending were the best practices of professional seamanship. The sinking of the YFD-70 was from no fault or negligence of Western Towboat or the tug Ocean Ranger.

I reserve the right to amend this report should further information become available.

Captain Bruce Fox
Bruce A. Fox

Simms Showers has agreed to my hourly rate, plus retainer which is available upon request. I have not testified at trial or by deposition in the past 4 years.

Captain Bruce Fox
Bruce A. Fox